



IN THE UNITED STATES PATENT AND TRADE MARK OFFICE

PATENT
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IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant:	YOSHIDA, et al.	Conf.:	6882
Appl. No.:	10/088,600	Group:	3761
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For:	DISPOSABLE DIAPER		

DECLARATION UNDER 37 CFR § 1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In connection with the above-identified U.S. patent application, I, Satoshi Yoshida, a citizen of Japan say and declare as follows:

1. I am a co-inventor of the subject matter disclosed and claimed in the above-identified U.S. Application Serial No. 10/088,600, which was filed in the United States Patent and Trademark Office on March 21, 2002.

2. I am familiar with the outstanding office action dated March 10, 2005, and the Examiners rejection of pending claims 1-5 under the provisions of 35 USC § 103(a) over the disclosure of Alper et al. US 5,149,741 (Issued September 22, 1992) in view of Fries et al. US 5,549,592

(Issued August 27, 1996), as set forth in paragraph "4." of the outstanding office action.

3. I am familiar with each of the cited art references of Alper et al. US 5,149,741 and Fries et al. US 5,549,592, and even more particularly Example 12 of Alper et al. US 5,149,741, which is disclosed therein at column 12, lines 11-20 as follows:

EXAMPLE 12

A sample of adhesive which is formulated with chemical characteristics within the range specified for the present invention. In the present example, a blend of KRATON 1102 (S-B-S) and KRATON 1111 (S-I-S) is employed. As should be understood, this compound was formulated in accordance with the teachings of Puletti et al. More particularly, this compound is set forth as Example 2, in Table II of Puletti et al.

4. I am also familiar with the Puletti et al., U.S. Pat. No. 4,419,494 (Issued December 6, 1983), which is referred to in Example 12 of Alper et al. US 5,149,741 (Issued September 22, 1992), and more particularly I am familiar with Example 2 in Table II of Puletti et al. U.S. Pat. No. 4,419,494 (*Table II from Puletti et al., U.S. Pat. No. 4,419,494 is reproduced below for the Examiner's convenience*):

TABLE II

Kraton 1102	—	25	25	--	32	--
Kraton 1111	30	5	5	--	--	--
Kraton 1650	--	--	--	27.5	--	--
(Polystyrene-polyethylene-butylene-polystyrene)	--	--	--	--	--	35
Solprene 418						
(branched isoprene-styrene block copolymer)	--	5	--	--	--	5
Macromelt 6238*						
Macromelt 6240	5	--	5	7.5	5	--
Glycerol Ester of Hydrogenated Rosin	--	--	--	--	45	35
Foral 105	38.5	38.5	43.5	38.5	--	--
Escorez 5320	20	20	20	20	--	--
Mineral Oil	5	5	--	5	--	--
Paraffin Wax(mp. 150-155°F.)	--	--	--	--	25	30
Antioxidant	2	2	2	2	1.8	1.8

*An acid terminated polymeric fatty acid polyamide derived from tall oil.

5. I am also familiar with the following specific teachings at column 17, lines 38-44 of Alper et al. US Pat. No. 5,149,741 regarding its Example 12:

...Additionally, it should be noted that the adhesive formulation, in accordance with the teachings of Puletti et al. (Example 12) had an unacceptably high viscosity and further could not be tested because the viscosity prevented it from being coated in the manner called for in the tests which were described earlier.

6. Experiment – Graph of Viscosity Temperature Curves

Based on the issue dates of the Puletti et al., U.S. Pat. No. 4,419,494 (Issue Date - December 6, 1983) and Alper et al. US 5,149,741 (Issue Date - September 22, 1992), I declare that it would be extremely difficult, if not totally impossible, to obtain materials whereby Example 12 of Alper et al. US 5,149,741 could be reproduced exactly in an effort to ascertain if the composition of Example 12 of Alper et al. US 5,149,741 possessed a “melt viscosity of from 30 Pa·s at 140°C to 100 Pa·s at 140°C” as is recited in pending claim 1.

Thus, in order to compare the present invention as claimed to Example 12 of Alper et al. US 5,149,741, I have endeavored to compare the melt viscosity of best mode of the present invention (Example 1 in the specification) with the reported melt viscosity of Example 12 in Alper et al. US 5,149,494. More particularly, I have endeavored to determine if Example 1 in the present specification (and more broadly a melt viscosity range of “from 30 Pa·s at 140°C to 100 Pa·s at 140°C”) would overlap with the melt viscosity of Example 12 of Alper et al. US 5,149,741. [In this respect, the melt viscosity of Example 12 of Alper et al. US 5,149,741 was measured at a temperature of 325° F (=163°C), and possessed a melt viscosity of 40,900 cP (= 40.9 Pa·s), *see melt viscosities reported in Table II of Alper et al. US 5,149,494*].

To this end I enclose a graph with the present declaration, wherein I have plotted the expected temperature viscosity curve for Example 1 of the present invention based on data obtained by testing at 140° C (*solid line temperature viscosity curve*). I have also plotted expected temperature viscosity curves (*dotted temperature viscosity curves*) to reflect the claimed range of from 30 Pa·s at 140° C to 100 Pa·s at 140° C (*see claim 1*).

In the attached graph, where the temperature viscosity curves intersect the dotted vertical temperature line at 163° C, provides the expected viscosity for each of Example 1 of the instant invention at a temperature of 163° C (*solid line temperature viscosity curve*) and for "30 Pa·s at 140° C" and "100 Pa·s at 140° C" (*dotted line viscosity curves*) at a temperature of 163° C. That is, where the solid line and dotted line temperature viscosity curves cross the dotted vertical temperature line at 163° C is the expected corresponding shifted viscosity values for each of Example 1 in the present specification, and the end points of the claimed range of from 30 Pa·s at 140° C to 100 Pa·s at 140° C, respectively.

As shown in the enclosed graph, each of the viscosities of Example 1, and those plotted for each of the end points of the claimed range of from 30 Pa·s at 140° C to 100 Pa·s at 140° C, respectively, all fall below the reported viscosity value of the Alper et al. US 5,149,494 Example 12 reported viscosity when measured at 325° F (= 163° C) of 40,900 cP (= 40.9 Pa·s).

Thus, using data from the best mode of the present invention (Example 1 in the instant application) and by graphing expected temperature viscosity curves to reflect expected corresponding viscosity values at 163° C, one of ordinary skill in the art would expect the melt viscosity of Example 12 of Alper et al. US 5,149,494 is fully outside the expected melt viscosity range of Example 1 in the present invention as well as the claimed range of 30 Pa·s at 140° C to 100 Pa·s at 140° C (*see claim 1*). As such, no overlap occurs between Example 12 of Alper et al. US 5,149,494, and no motivation is provided by Alper et al. that would allow one to arrive at the viscosity range recited in the pending claims (*see claim 1*).

It is also noted that the attached graph contains reported data for Examples 3 and 6 of Alper et al. US 5,149,494, which were 10,260 cP and 10,363 cP at 325° F, respectively, which equates to 10.26 Pa·s at 163° C and 10.36 Pa·s at 163° C, respectively, and which are also shown in the attached graph to be outside expected viscosity values for the range of 30 Pa·s at 140° C to 100 Pa·s at 140° C if measured at 163° C.

7. Teaching Away - Alper et al. US 5,149,494

As indicated previously (*see 5. above*), at column 17 of Alper et al. US 5,149,494 the same discloses that "...the adhesive formulation, in accordance with the teachings of Puletti et al. (Example 12) had an unacceptably high viscosity and further could not be tested because the viscosity prevented it from being coated in the manner called for in the tests which were described earlier."

Based on such teachings in the Alper et al. US 5,149,494 patent, I submitted that the same actually teaches those of ordinary skill in the art away from using its Example 12, and provides no motivation for those of ordinary skill in the art to utilize the same as a hot-melt adhesive in the formation of a diaper as instantly recited in pending claim 1, or any of the other remaining claims 2-6 under consideration at present.

8. Conclusion

Based on the temperature viscosity curves shown in the attached graph, one of ordinary skill in the art would realize that Example 12 of Alper et al. US 5,149,494 possesses a viscosity that falls outside the present invention as claimed. This fact when combined teachings at column 17 of the same Alper et al. patent that its example 12 was unacceptable, fails to motivate those of ordinary skill in the art to arrive at the instant invention as claimed.

9. The undersigned declares further that all statement made herein of his own knowledge are true and all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that Such willful false statement may jeopardize the validity of above identified application or any patent issuing thereon.

June 20, 2005

Satoshi Yoshida

Satoshi Yoshida